



INSTALLATION



MAINTENANCE

# Electrification of the Lake Village Ganvié from Floating Photovoltaic Sources

## Summary

Country	Benin
Implementer	Polytechnic School of Abomey-Calavi (Ecole Polytechnique d'Abomey-Calavi, EPAC)
Target groups	Private users and the health center in Ganvié 2
Duration	01/2020 – 03/2021
Type of energy use	Electrification

## Challenge

The village of Ganvié is a pile-dwelling village in Lake Nokoué north of Cotonou. It is not yet connected to the national power grid. The people of Ganvié have difficulties with energy supply and mainly use oil as their primary source of energy. This enormously limits their income-generating activities, as well as risking fires and causing further health issues. The maternity ward in the village is not lit. Most households still use lanterns, candles and lampions for their illumination. This has negative impacts, e.g. on the performance of students and the health of the population. With access to electricity, the overall living situation of the population of Ganvié would change for the better.

## Impact Logic

The target groups are the citizens of Ganvié and the local health center. The aim is to 1) develop income-generating activities based on the use of electrical energy, 2) improve learning conditions, 3) improve the quality of (public) services, 4) create jobs, and 5) provide lighting. The

photovoltaic (PV) panels are mounted on a raft made of recycled canisters and logs. This raft building technique is already used by the local population. The floating PV raft has the potential to create a protection zone for fish and to reduce the formation of algae. The effects of the project are as follows: First, a photovoltaic field is installed on the lake Nokoué, also a technical maintenance committee as well as a financial management committee is set up to accompany and monitor the project activities. Second, a mini hydro plant provides electricity for lighting and income generating activities. Third, there are 100 rechargeable lamps distributed to 200 households in the village. The recharging of mobile phones and small lamps is offered by a central contact point (Social or Commercial Centre) for electricity in the village.

## Innovative Project Elements

The innovative technological approach of floating PV plants is increasingly implemented worldwide, but in Benin such a project can be considered to be among the first of its kind. Because of its pilot character, the researchers from EPAC will monitor the installation closely and assist the local authority in managing it.

## FURTHER INFORMATION

[www.gruene-buergerenergie.org](http://www.gruene-buergerenergie.org)

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